## Preparing teachers to educate high-ability students: What deans should know

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#### The Need for a Focus on Excellence



## U.S. student performance on international assessments

Trends in International Mathematics and Science Study (TIMMS)

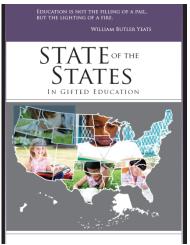
Programme for International Student Assessment (PISA)



# High-ability students show little academic growth and have few opportunities for talent development.



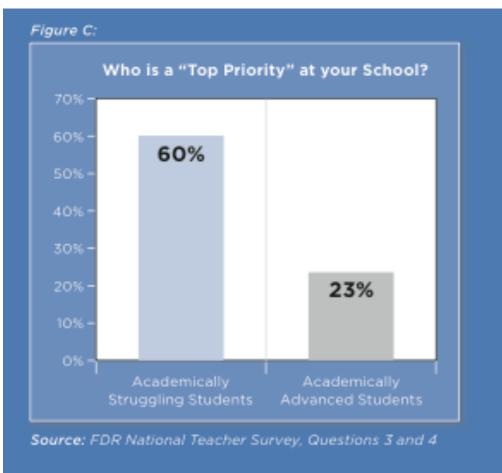
achievementrap





## High-ability students in schools

"Teachers are much more likely to indicate that struggling students, not advanced students, are their top priority" (p. 3).

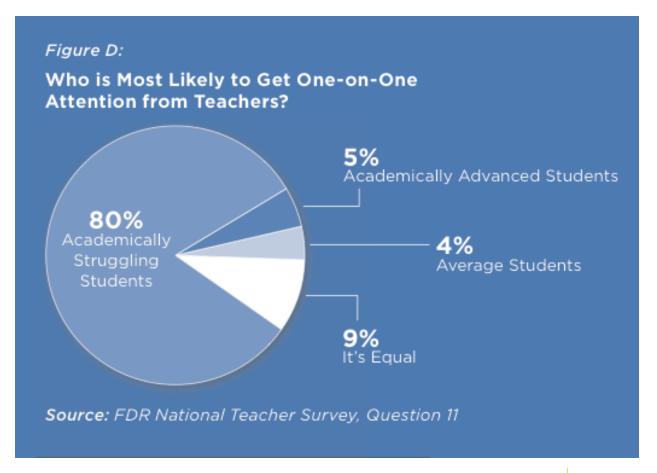


(Loveless, Farkas, & Duffet, 2008)



## High-ability students in schools

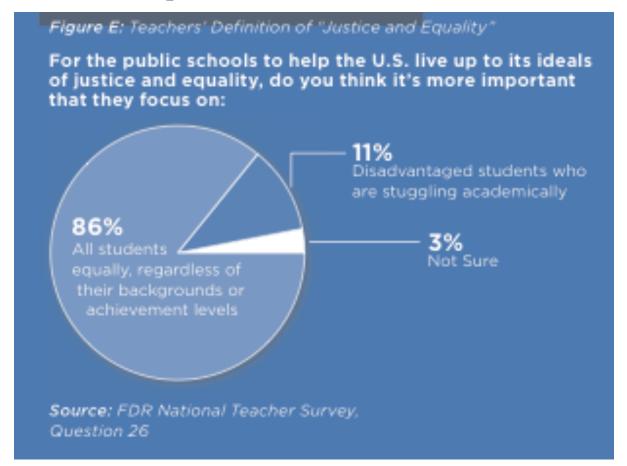
"Low-achieving students receive dramatically more attention from teachers" (p. 3). (Loveless, Farkas, & Duffet, 2008)





## High-ability students in schools

"Still, teachers believe that all students deserve an equal share of attention" (p. 3). (Loveless, Farkas, & Duffet, 2008)





# What Role do Colleges of Education Have in Preparing Teachers To Educate High-Ability Students?





## Does your College of Education...

- Offer a degree program in Gifted and Talented?
- •Offer a minor (for undergrads) or specialization (graduate programs)?
- Have coursework to satisfy a state endorsement?
- Offer at least 1 lecture on GT education in an Exceptional Learners course?



# University-based centers/programs of gifted education

The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development The University of Iowa

National Research Center on Gifted Education University of Connecticut

Center for Gifted Education The College of William and Mary

Programs for Talented Youth/Study of Mathematically Precocious Youth

Vanderbilt University



# University-based centers/programs of gifted education

Carnegie Mellon Institute for Talented Elementary Students (C-MITES)

Carnegie Mellon University

Center for Talent Development (CTD)

Northwestern University

Center for Talented Youth

Johns Hopkins University

Talent Identification Program

**Duke University** 

Academic Talent Development Center

University of California at Berkley



# University-based centers/programs of gifted education

Gifted Education Resource Institute

Purdue University

The Center for Gifted Studies

Western Kentucky University

Center for Gifted Education

The University of Louisiana at Lafayette

The Texas Academy of Math and Science

University of North Texas



# University-based centers/ programs of gifted education

Halbert Robinson Center for the Study of Capable Youth

University of Washington

Curry School of Education University of Virginia

Torrance Center for Creativity University of Georgia

The Leta Hollingworth Center for the Study of the Gifted

Columbia University, Teachers College



A Solution for High-Ability Learners from Gifted Education: Academic Acceleration



#### What is academic acceleration?

"Progress through an educational program at rates faster or at ages younger than conventional." (Pressey, 1949)

"Acceleration practices involve allowing a student to move through traditional educational organizations more rapidly, based on readiness and motivation."

> (NAGC position paper, 2004)





# Why accelerate?

It's a response to the wide range of individual differences in a classroom.

All students have the **right to learn** something new each day.

Acceleration can help provide high-ability students with the **opportunity** to develop their talents.

Research supports the **effectiveness** of acceleration for academic and social-emotional outcomes in the short term and long term.



#### Acceleration options: Two categories

#### Content-based acceleration

- students typically remain with peers of same age and grade for most of the day
- examples: dual enrollment, AP coursework, single-subject acceleration

#### **Grade-based acceleration ("grade skipping")**

- students do not remain with same-age peers
- typically shortens the amount of time spent in K-12 schooling
- examples: grade acceleration, early entrance to school, early entrance to college



## There is a disconnect between evidence and beliefs





## Acceleration of gifted students

"The evidence I have seen indicates rather conclusively that gifted students who are accelerated get a better education than equally gifted students who are not accelerated."



James B. Stroud (1957) The University of Iowa



"No paradox is more striking than the inconsistency between research findings on acceleration and the failure of our society to reduce the time spent by superior students in formal education." M. J. Gold

Education of the Intellectually Gifted (1965)





"Acceleration is one of the most curious phenomena in the field of education. The research on acceleration is so uniformly positive, the benefits of appropriate acceleration so unequivocal, that it is difficult to see how our educators could oppose it."



James H. Borland Teachers College, Columbia University (1989)

"There is little doubt that educators have been largely negative about the practice of acceleration despite abundant research evidence attesting to its viability."

> J. J. Gallagher University of North Carolina - Chapel Hill A Nation Deceived, Vol. II (2004)

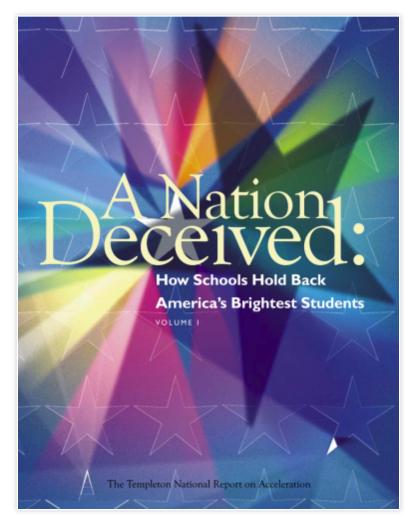




#### Acceleration is effective

- Summary of 50 years of research
- Robust and consistent findings
- Positive academic & social effects

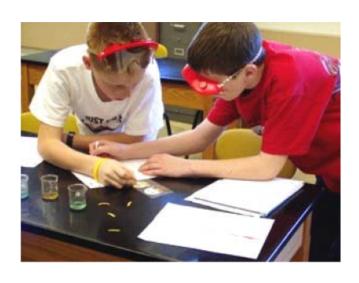
Discusses disconnect between research and practice





#### Academic effects

- Short-term (Kulik, 2004; Rogers, 2010)
  - positive outcomes
  - "No other arrangement for gifted children works as well as acceleration" (Kulik, 2004).
- Long-term academic effects (Lubinski & Benbow)
  - positive outcomes (academic, educational, professional, vocational)
  - "Intellectually precocious participants who experienced accelerated opportunities, view them positively well into adulthood" (Lubinski, 2004).







## Profoundly gifted adolescents: 20 years later

- Webb, Lubinski, & Benbow, 2010
- The top 0.01%
- Students experienced considerable varieties of acceleration in pre-college years.
- Strong positive results in the follow-up studies.
- Students' only regret regarding acceleration: they wanted more in pre-college setting



#### Social effects of acceleration

Effects are positive (there is no harm)

"None of the {accelerative} options has been shown to do psychosocial damage to gifted students as a group; when effects are noted, they are usually (but not invariably) in a positive direction."

Robinson (2004)





#### Grade-Skipping

"Not only was academic achievement more positive for the grade skipped learners, but also their social adjustment and academic self-esteem were more positive."



Karen B. Rogers University of St Thomas (Minnesota)

#### Minority students and acceleration

- Project EXCITE results: favorable experiences and attitudes in acceleration in math, both students and parents
- Possible issues of peer pressure regarding advanced or accelerated work.
- African-American students in AP courses: positive experiences, benefits of formal support structures (Hertberg-Davis, Williams, & Callahan, 2010)



## Why the disconnect?

- Not aware of the research
- Social-emotional adjustments
- Long-term effects
- Hurrying or pressuring children
- Status quo causes no harm
- Does not fit with personal preferences or political agendas
- Colleges of Education



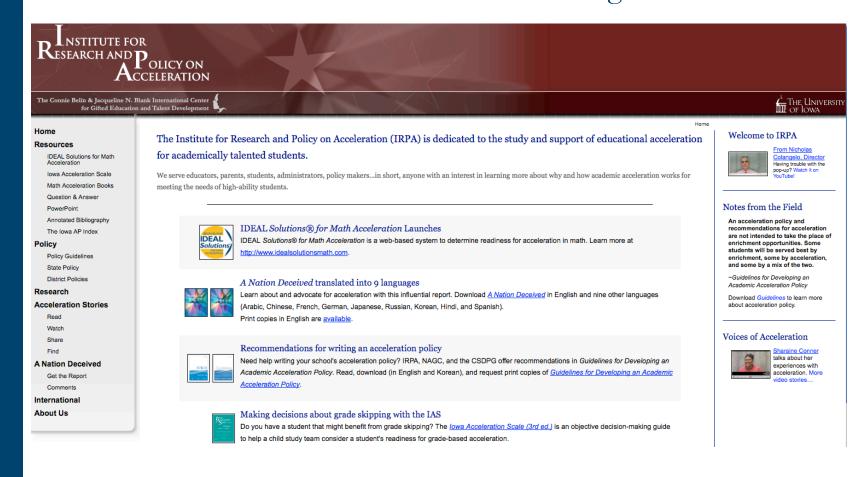
# Increasing Excellence: Schools of Education Working with Schools



What information, resources, or support would you (or your faculty) find useful?



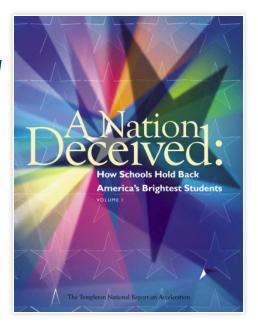
#### Institute for Research and Policy on Acceleration (IRPA) Belin-Blank Center for Gifted Education The University of Iowa www.accelerationinstitute.org



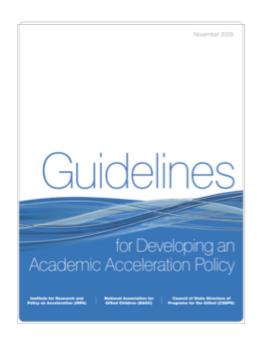


#### Policy and advocacy support for acceleration

A Nation Deceived



Guidelines for Developing an Academic Acceleration **Policy** 



#### testimonials



#### PowerPoint presentation

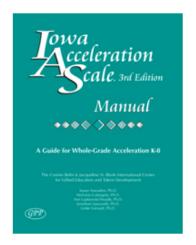


#### policy information

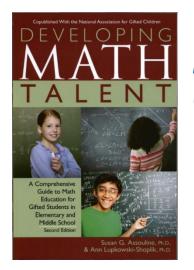




#### Tools & products for acceleration decisions



**Iowa Acceleration Scale** for grade acceleration



**Developing Math Talent** (2<sup>nd</sup> ed.) by Assouline & Lupkowski-Shoplik

**IDEAL Solutions for Math Acceleration** (www.idealsolutionsmath. com)





"The root of excellence–from the Greek–is not, properly, to surpass others-or to be greater than they, but, rather, to rise up naturally, to raise—as a crop is raised. The oldest root in the wordfrom the Greek-is that for HILL.

Imagine that hill. It was not placed on the landscape to make the prairie feel flat. It was not raised to make the sky tremble. Its job is to be a hill. We do not know why, but we know a hill-less world would be unbearable."

Jorie Graham

"A Call to Appreciate Excellence" *Vision*, v. 5(1), p. 7 1996 Pulitzer Prize in Poetry



# Thank you.

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